

We claim:

1. A method of cleaning a cylinder of a printing press comprising:

(a) first, placing a cleaning fabric supply roll having a strip of cleaning fabric in a cylinder cleaning system;

(b) second, contacting said strip of cleaning fabric with a low volatility, organic compound solvent which does not evaporate readily at ambient temperature and pressure and soaking and saturating said strip of cleaning fabric with said solvent; and

(c) third, cleaning said cylinder with said saturated strip of cleaning fabric.

2. The method as defined in claim 1 further comprising the step of winding said used strip of cleaning fabric on a take-up shaft.

3. The method as defined in claim 1 wherein said strip of cleaning fabric is in contact with said solvent until said strip of cleaning fabric absorbs a measured amount of said solvent such that said strip of cleaning fabric is saturated to functional equilibrium with said solvent.

4. The method as defined in claim 3 further comprising the step of removing said cleaning fabric supply roll from said container containing said solvent.

5. The method as defined in claim 1 further comprising between steps two and three the step of removing

3 excess solvent from said saturated strip of cleaning fabric to  
4 obtain a strip of cleaning fabric saturated to functional  
5 equilibrium.

1           6. The method as defined in claim 5 wherein said step  
2 of contacting said strip of cleaning fabric comprises dipping  
3 only a portion of said cleaning fabric supply roll in a container  
4 containing said solvent and rotating said cleaning fabric supply  
5 roll in said container to allow at least substantially all of  
6 said strip of cleaning fabric to be brought in contact with said  
7 solvent prior to being unwound from said cleaning fabric supply  
8 roll.

1           7. The method as defined in claim 5 further  
2 comprising the step of unwinding, said strip of cleaning fabric  
3 from said cleaning fabric supply roll prior to bringing said  
4 strip of cleaning fabric in contact with said solvent.

1           8. The method as defined in claim 7 wherein said step  
2 of contacting said strip of cleaning fabric with said solvent  
3 comprises dipping said unwound strip of cleaning fabric through a  
4 container containing said solvent.

1           9. The method as defined in claim 8 wherein said step  
2 of removing said excess solvent comprises squeezing said excess  
3 solvent from said strip of cleaning fabric.

1           10. The method as defined in claim 8 further  
2 comprising the step of storing said removed excess solvent in  
3 said container.

1 11. The method as defined in claim 8 further  
2 comprising the step of storing said removed excess solvent in a  
3 separate excess solvent container.

1 12. The method as defined in claim 8 wherein said  
2 contacting step comprises using a dipping roller to dip said  
3 strip of cleaning fabric into a container containing said  
4 solvent.

1 13. The method as defined by claim 12 wherein said  
2 removal step comprises using a squeezing roller and a side of  
3 said container to squeeze said strip of cleaning fabric.

1 14. The method as defined by claim 13 wherein a single  
2 roller is used to dip said strip of cleaning fabric and squeeze  
3 said strip of cleaning fabric against said a surface of said  
4 container.

1 15. The method as defined by claim 13 further  
2 comprising the step of adjusting the gap between said squeezing  
3 roller and said side of said container to control the amount of  
4 said solvent in said strip of fabric cloth.

1 16. The method as defined in claim 1 further  
2 comprising the step of unwinding, said strip of cleaning fabric  
3 from said cleaning fabric supply roll prior to bringing said  
4 strip of cleaning fabric in contact with said solvent.

1 17. The method as defined in claim 1 wherein said step  
2 of contacting said strip of cleaning fabric comprises dipping at  
3 least substantially all of said cleaning fabric supply roll in a

4 container containing said solvent.

1 18. A soak on press assembly for use in a printing  
2 press cylinder cleaning system for cleaning a cylinder  
3 comprising:

4 (a) a low volatility, organic compound solvent  
5 which does not evaporate readily at ambient temperature and  
6 pressure;

7 (b) soaking means for soaking and saturating at  
8 least a portion of said strip of cleaning fabric;

9 (c) removal means for removing excess solvent  
10 from said strip of cleaning fabric and obtaining a strip of  
11 cleaning fabric saturated to functional equilibrium with solvent;

12 (d) cylinder cleaning means for bringing said  
13 saturated to equilibrium strip of cleaning fabric into contact  
14 with said cylinder and cleaning said cylinder; and

15 (e) take-up means for collecting said strip of  
16 cleaning fabric after it has been used to clean said cylinder.

1 19. The soak on press assembly as defined by claim 18  
2 wherein said soaking means comprises a container containing said  
3 solvent, at least a portion of said cleaning cloth supply roll  
4 dipped in said solvent.

1 20. The soak on press assembly as defined by claim 19  
2 in which said soaking means further comprises rotating means for  
3 rotating said cleaning fabric supply roll to allow said strip of  
4 cleaning fabric to be soaked and saturated.

1           21. The soak on press assembly as defined by claim 19  
2 further comprising means for removing said cleaning cloth supply  
3 roll from said solvent.

1           22. A soak on press assembly as defined in claim 18  
2 wherein said soaking means comprises a container containing said  
3 solvent, said solvent filled container not in contact with said  
4 cleaning fabric supply roll.

1           23. A soak on press assembly as defined in claim 22  
2 wherein said soaking means further comprises a dipping means for  
3 placing said strip of cleaning fabric into said solvent stored in  
4 said solvent storage means to soak and saturate said strip of  
5 cleaning fabric.

1           24. The soak on press assembly as defined by claim 23  
2 wherein said removal means comprises a squeezing means for  
3 squeezing excess solvent from said strip of cleaning fabric.

1           25. The soak on press assembly as defined by claim 24  
2 wherein said squeezing means and said dipping means comprise a  
3 unitary structure.

1           26. A soak on press assembly for use in a printing  
2 press cylinder cleaning system comprising:

3                   (a) a mounting assembly affixed to said printing  
4 press to support said soak on press assembly;

5                   (b) a cleaning cloth supply roll comprising a  
6 strip of cleaning fabric;

7                   (c) at least one container, said container placed

8 in contact with said mounting means;

9 (d) a low volatility, organic compound solvent  
10 which does not evaporate readily at ambient temperature and  
11 pressure, said solvent located in said at least one container and  
12 at least a portion of said cleaning cloth supply roll placed  
13 within said solvent to soak and saturate said strip of cleaning  
14 fabric;

15 (e) at least one squeezing roller operatively  
16 associated with said strip of cleaning fabric for removing excess  
17 solvent from said strip of cleaning fabric to obtain a strip of  
18 cleaning fabric saturated to functional equilibrium with said  
19 solvent;

20 (f) a cylinder cleaning means for bringing said  
21 saturated to functional equilibrium strip of cleaning fabric into  
22 contact with said cylinder to be cleaned and cleaning said  
23 cylinder; and

24 (g) a take-up roll means for collecting said  
25 strip of cleaning fabric.

1 27. The soak on press assembly as defined in claim 26  
2 wherein said at least one squeezing roller and said strip of  
3 cleaning fabric are operatively associated with said cylinder to  
4 remove excess solvent from said strip of cleaning fabric by  
5 squeezing said strip of cleaning fabric between said at least one  
6 squeezing roller and a surface of said container.

1 28. The soak on press assembly as defined in claim 27

2 wherein said squeezing roller is in a movedly fixed relationship  
3 with said container for adjusting the distance between said  
4 squeezing roller and said surface of said container to control  
5 the amount of solvent in said strip of cleaning fabric.

1 29. A soak on press assembly for use in a printing  
2 press cylinder cleaner comprising:

3 (a) a mounting assembly affixed to said printing  
4 press for supporting said soak on press assembly;

5 (b) a cleaning fabric supply roll comprising a  
6 strip of cleaning fabric, said cleaning fabric supply roll  
7 rotatably mounted on said mounting assembly;

8 (c) at least one container;

9 (d) a low volatility, organic compound solvent  
10 which does not evaporate readily at ambient temperature and  
11 pressure, said solvent located in said at least one container;

12 (e) a dipper at least partially submerged in said  
13 solvent, said strip of cleaning fabric adjacent to said dipper so  
14 that said strip of cleaning fabric is soaked and saturated in  
15 said solvent;

16 (f) a squeezer, said strip of cleaning fabric  
17 located within a gap between said squeezer and a surface of said  
18 container and in contact with said squeezer and said surface of  
19 said container so that said strip of cleaning fabric is squeezed  
20 and said excess solvent is removed from saturated cleaning fabric  
21 and placed in said at least one container and a strip of cleaning

22 fabric saturated to functional equilibrium is obtained;

23 (g) cylinder cleaning means for bringing said  
24 strip of cleaning fabric into contact with said cylinder to be  
25 cleaned and cleaning said cylinder; and

26 (h) take-up means for collecting said strip of  
27 cleaning fabric.

1 30. The soak on press assembly as defined by claim 29  
2 wherein said at least one container is a single container.

1 31. The soak on press assembly as defined by claim 30  
2 wherein said dipper and said squeezer consists of a said roller.

1 32. The soak on press assembly as defined by claim 29  
2 wherein said squeezer comprises a roller.

1 33. The soak on press assembly as defined by claim 29  
2 wherein said dipper comprises a roller.

1 34. The soak on press assembly as defined by claim 29  
2 wherein said squeezer is in a movedly fixed relation with said  
3 surface of said container so that the size of said gap between  
4 said squeezer and said surface of said container may be changed  
5 so that the amount of solvent in said strip of cleaning fabric  
6 may be adjusted.

A'D 35. A method of presoaking cloth for a cleaning system  
2 on site comprising:

3 (a) contacting a strip of cleaning fabric with a  
4 low volatility, organic compound solvent which does not evaporate  
5 readily at ambient temperature and pressure and soaking and



6 saturating said strip of cleaning fabric with said solvent; and

7 (b) wrapping said strip of cleaning fabric to  
8 form a cleaning fabric supply roll; and

9 (c) engaging said saturated cleaning fabric  
10 supply roll with a printing press having a cylinder to be cleaned  
11 without disposing a heat-sealed plastic sleeve about said fabric  
12 roll and without substantially disturbing the distribution of  
13 said solvent in said fabric roll and detrimentally affecting the  
14 cleaning ability of the fabric.

1 36. The method as defined in claim 35 further  
2 comprising the step of removing excess solvent and obtaining a  
3 fabric saturated to functional equilibrium.

1 37. The method as defined in claim 36 wherein the step  
2 of removing said excess solvent comprises squeezing said strip of  
3 cleaning fabric between at least a pair of squeezing rollers.

1 38. The method as defined in claim 36 wherein said  
2 steps of contacting and removing are performed after said  
3 wrapping step.

1 39. The method as defined in claim 36 wherein said  
2 contacting and removing steps are performed prior to said  
3 wrapping step.

1 40. The method as defined in claim 39 wherein said  
2 contacting step comprises running said strip of cleaning fabric  
3 through a container filled with said solvent.

1 41. The method is defined in claim 36 wherein said

2 contacting step is performed by using a dipper to dip the strip  
3 of cleaning fabric into a container holding said solvent and said  
4 removing step comprises squeezing said strip of cleaning fabric  
5 between said dipper and a squeezer.

6  
1 42. The method is defined in claim 41 wherein said  
2 dipper is a roller and said squeezer is a roller.

1 43. The method is defined in claim 35 wherein said  
2 contacting step comprises contacting said strip of cleaning  
3 fabric with a measured amount of solvent whereby after absorption  
4 of said solvent, said strip of cleaning fabric is in functional  
5 equilibrium.

1 44. A method for presoaking a cleaning fabric on site  
2 comprising:

3 (a) unwinding a strip of cleaning fabric from a  
4 bulk roll;

5 (b) applying a low volatility, organic compound  
6 solvent which does not evaporate readily at ambient pressure and  
7 temperature to at least one roller;

8 (c) contacting said unwound strip of cleaning  
9 fabric to said at least one roller to soak and saturate said  
10 strip of cleaning fabric with solvent;

11 (d) winding said soaked and saturated strip of  
12 cleaning fabric into a cleaning fabric supply roll.

1 45. The method as defined in claim 44 further

2 comprising removing excess solvent from said saturated fabric and  
3 obtaining a fabric saturated to functional equilibrium with  
4 solvent.

1 46. A device for soaking a strip of cleaning fabric on  
2 site comprising:

3 (a) means for mounting a bulk supply roll having  
4 said strip of cleaning fabric wound around a shaft;

5 (b) solvent applying means for applying a low  
6 volatility, organic compound solvent which does not readily  
7 evaporate at ambient pressure and temperature to said strip of  
8 cleaning fabric; and

9 (c) means for forming a cleaning fabric supply  
10 roll.

1 47. The device for soaking a strip of cleaning fabric  
2 on site as defined by claim 46 further comprising calendaring  
3 means for reducing the thickness and increasing the length of  
4 said strip of cleaning fabric on said shaft without substantially  
5 increasing the diameter of said cleaning fabric supply roll.

1 48. The device for soaking a strip of cleaning fabric  
2 on site as defined by claim 46 further comprising an excess  
3 solvent removing means for obtaining a strip of cleaning fabric  
4 saturated to functional equilibrium with said solvent.

1 49. The device for soaking a strip of cleaning fabric  
2 on site as defined by claim 46 further comprising a squeezer  
3 operatively associated with said solvent applying means to

4 squeeze said strip of cleaning fabric between said solvent  
5 applying means and said squeezer.

1 30. The device for soaking a strip of cleaning fabric  
2 on site as defined by claim 49 wherein said solvent applying  
3 means comprises at least one roller and said squeezer comprises  
4 at least one roller.

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